WHAT IS CLAIMED IS:

1. Apparatus for wireless communication of information, comprising:

means for performing at least one of modulating and demodulating information signals; and

means for information transmission/reception, said information transmission/reception means providing for information transmission using a first polarization and for information reception using a second polarization to thereby isolate information transmission from information reception.

2. Apparatus according to claim 1, wherein said performing means further includes:

a modulating means having a data input means, a data processing means, and a power output means.

3. Apparatus according to claim 2, wherein said data input means is configured to receive data modulated on an intermediate frequency of 2-3 GHz.

4. Apparatus according to claim 3, further including:

a local oscillator for modulating said data with a frequency on the order of 18 GHz.

5. Apparatus according to claim 2, wherein said power output means further includes:

plural, parallel amplification channels.

6. Apparatus according to claim 5, wherein said power output means further includes:

at least one coupler for splitting a signal from said data processing means into said plural, parallel amplification channels.

7. Apparatus according to claim 5, wherein said power output means further includes:

at least three couplers for splitting an output from said data processing means into four separate amplification channels, said output from said data processing means being amplified to produce at least about a 0.5 W output in each of said channels.

8. Apparatus according to claim 5, wherein said power output means further includes:

at least one device for combining outputs from each of said plural, parallel amplification channels into a single output channel.

9. Apparatus according to claim 6, wherein said at least one coupler is a 90° hybrid.

10. Apparatus according to claim 6, wherein said power output means further includes:

at least one coupler for combining outputs from said plural, parallel amplification channels into a single output channel.

11. Apparatus according to claim 1, wherein said information transmission/reception means includes:

a transmission antenna; and

a reception antenna separated by a distance from said transmission antenna.

12. Apparatus according to claim 1, wherein said information transmission/reception means further includes:

a single antenna having a dual polarization capability for transmitting information with a first polarization, and for receiving information with a second polarization.

13. Apparatus according to claim 1, further including:

regulator means having at least one DC voltage regulator for providing a regulated DC output voltage to said performing means.

14. Apparatus according to claim 13, wherein said DC voltage regulator further includes:

at least two DC voltage outputs; and

means for inhibiting a first of said two DC voltage outputs when a second of said two DC voltage outputs is above a predetermined threshold.

15. Apparatus according to claim 1, wherein said performing means further includes:

a demodulating means having a data input means and a data processing means.

16. Apparatus according to claim 2, wherein said performing means further includes:

a demodulating means having a data input means and a data processing means.

17. Apparatus according to claim 16, further including:

a local oscillator for supplying a modulating signal to said modulating means, and for providing a demodulating signal to said demodulating means.

18. Apparatus according to claim 16, further including:

hermetically sealed housings for containing components of a transceiver, components of said modulating means and said demodulating means being mounted directly to said hermitically sealed housings.

19. A method for wireless communication of information, comprising the steps of:

performing at least one of modulating and demodulating information signals; and